

Attorney Docket Number I 2000.608 US C1

**II. Claim Amendments**

1. (Original) A construct comprising a gene-mutated EIAV comprising two (2) redundant stop codons and a deletion wherein said virus lacks the ability to express the mutated gene protein *in vivo* and wherein said lack of expression can be used to differentiate vaccinated from non-vaccinated or infected mammals.
2. (Original) The construct of Claim 1 wherein the two redundant stop codons are inserted into the S2 open reading frame.
3. (Original) The construct of Claim 1 wherein the two stop codons are engineered into the proviral DNA of EIAV<sub>UK</sub> at S2 amino acids G<sup>5</sup> and G<sup>18</sup>.
4. (Original) The construct of Claim 1 wherein said stop codon does not affect normal expression of the envelope protein.
5. (Original) The construct of Claim 1 wherein the deletion is a deletion of between 6 and 25 base pairs.
6. (Original) The construct of Claim 5 wherein the said deletion is located at least 7 base pairs downstream of the stop codon of the second coding region of TAT.
7. (Original) The construct according to Claim 5 wherein said deletion does not interrupt the splice donor 2 site downstream of the stop codon of the second coding region of TAT and upstream of the initiation codon of the S2 open reading frame.
8. (Original) The construct according to Claim 5 wherein said deletion is upstream of the envelope coding region.
9. (Original) The construct of Claim 5 wherein the deletion is 9 base pairs.

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10. (Original) The construct of Claim 3 wherin generation of the stop codon at G<sup>5</sup> further comprises the insertion of a restriction endonuclease site whereby the restriction endonuclease is a molecular marker for differentiating between wildtype EIAV and the gene-mutated EIAV.

Claims 11-13 (canceled without prejudice or disclaimer)

14. (Original) A construct comprising a gene-mutated EIAV comprising two (2) redundant stop codons wherein the two redundant stop codons are inserted into the S2 open reading frame and engineered into the proviral DNA of EIAV<sub>UK</sub> at S2 amino acids G<sup>5</sup> and G<sup>18</sup> and a deletion comprising 9 base pairs outside the envelope open reading frame wherein said virus lacks the ability to express the mutated gene protein *in vivo* and wherein said lack of expression can be used to differentiate vaccinated from non-vaccinated or infected mammals.

15. (Original) A construct comprising a gene-mutated EIAV comprising two (2) redundant stop codons wherein the two redundant stop codons are inserted into the S2 open reading frame and engineered into the proviral DNA of EIAV<sub>UK</sub> at S2 amino acids G<sup>5</sup> and G<sup>18</sup> and a deletion comprising between 6 and 25 base pairs outside the envelope open reading frame wherein said virus lacks the ability to express the mutated gene protein *in vivo* and wherein said lack of expression can be used to differentiate vaccinated from non-vaccinated or infected mammals.